

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A coupling unit, comprising:
a connecting area for connecting to a transmitting and/or receiving module;
a holding-area-for holding sleeve configured to receive an optical fiber within the holding sleeve; and
a transparent coupling area configured for directly contacting the optical fiber and for directly coupling light between the optical fiber and the optical transmitting and/or receiving module when the optical fiber is inserted into said holding areassleeve and the optical transmitting and/or receiving module is connected to said connecting area;
said transparent coupling area formed integral with said holding areassleeve and said connecting area.
2. (Currently Amended) The coupling unit according to claim 1, wherein:
said coupling area has a side facing said holding areassleeve that forms a projecting stop surface for the optical fiber; and
said stop surface is for directly contacting a fiber core of the optical fiber when the optical fiber is inserted into said holding sleevearea.
3. (Currently Amended) The coupling unit according to claim 2, wherein:
said holding sleevearea defines a longitudinal axis; and
said stop surface runs at right angles to said longitudinal axis of said holding sleevearea.
4. (Original) The coupling unit according to claim 1, in combination with the optical fiber, wherein:
the optical fiber has a refractive index; and
said coupling area has a refractive index matched to the refractive index of the optical fiber.

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5. (Original) The coupling unit according to claim 1, wherein:
said coupling area has a side facing the transmitting and/or receiving module; and
said side facing the transmitting-and/or receiving module has an inclined light inlet or
light outlet surface.
6. (Currently Amended) The coupling unit according to claim 1, wherein said transparent
coupling area; said holding sleevearea, and said connecting area form a transparent, plastic
injection-molded part.
7. (Currently Amended) The coupling unit according to claim 1, further comprising:
a horizontally running base plate formed with said coupling area therein;
said base plate having an upper face connected to said holding sleevearea;
said holding sleevearea extending essentially at right angles with respect to said upper
face of said base plate; and
said base plate having a lower face connected to said connecting area.
8. (Currently Amended) The coupling unit according to claim 1, wherein said holding
sleevearea forms an elongated sleeve with a precision guide.
9. (Currently Amended) The coupling unit according to claim 1, wherein said holding
sleevearea is designed for holding a ceramic ferrule having a center configured with the optical
fiber.
10. (Original) The coupling unit according to claim 1, wherein said connecting area is
essentially cylindrical.
11. (Original) The coupling unit according to claim 10, wherein said connecting area is
designed for connecting to a TO can in which the transmitting and/or receiving module is
configured.

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12. (Currently Amended) The coupling unit according to claim 1, further comprising:
- a horizontally running base plate formed with said coupling area therein;
 - said base plate having an upper face connected to said holding sleevearea;
 - said holding sleevearea extending essentially at right angles with respect to said upper face of said base plate; and
 - said base plate having a lower face connected to said connecting area;
 - said base plate formed with a cutout passing through said base plate; and
 - said cutout running adjacent said coupling area of said base plate.

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13. (New) A coupling unit comprising:

a substantially cylindrical holding sleeve configured to receive an optical fiber within the holding sleeve;

a substantially cylindrical connecting area configured to receive an optical module within the connecting area, the connecting area further configured to optically align the optical module with the optical fiber when the optical fiber is inserted into said holding sleeve;

a coupling area configured to couple light between the optical fiber and the optical module when the optical fiber is inserted into the holding sleeve and the optical module is received within the connecting area, wherein the coupling area is formed integral with the holding sleeve and connecting area and a common axis is shared by the holding sleeve and the connecting area.

14. (New) The coupling unit according to claim 13, further comprising a cutout through a base plate, wherein the cutout extends from the holding sleeve to the coupling area along side the coupling area.

15. (New) The coupling unit according to claim 13, wherein the holding sleeve, connecting area, and coupling area are made from a transparent plastic material using an injection-molding process.

16. (New) The coupling unit according to claim 13, wherein the coupling area is transparent and has a refractive index substantially matched to a refractive index of the optical fiber.

17. (New) The coupling unit according to claim 13, wherein the optical module is a TO can and the connecting area receives the TO can and the TO can is secured to inner walls of the connecting area.

18. (New) The coupling unit according to claim 13, wherein said connecting area is substantially cylindrical and has an inner diameter that is sized to substantially conform to the outer diameter of the module.

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19. (New) The coupling unit according to claim 13, wherein:
said coupling area has an inclined surface configured to reflect light away from both the
module and the fiber.

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20. (New) A method for manufacturing a coupling unit comprising:
molding a substantially cylindrical connecting area, a substantially cylindrical holding sleeve, and a coupling area between the connecting area and the holding sleeve using an injection molding process, wherein the connecting area is sized and configured to receive an optical module, the holding sleeve is sized and configured to receive an optical fiber in alignment with the optical module, and wherein an axis of the substantially cylindrical holding sleeve is aligned with an axis of the a substantially cylindrical connecting area, wherein the connecting area, holding sleeve, and coupling area are integrally molded from a plastic material using an injection molding process.

21. (New) The method according to claim 20, wherein the plastic material is transparent.

22. (New) The method according to claim 20, securing a TO can module to inner walls of the connecting area, wherein the connecting area has an inner diameter that is sized to substantially conform to the outer diameter of the TO can.